

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008723**Date Inspected:** 21-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No			
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A

**Bridge No:** 34-0006**Component:** OBG segments**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG Trial assembly lift 4W

This QA received ZPMC Non Destructive Testing (NDT) notification No. 004032 and performed Ultrasonic Testing (UT) of approximately 10% of the welds previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a UT report for this date. The weld designations are as follows: SEG019C-014, 001, 016 and 040, SEG017B-017, 004 and 019.

This QA received ZPMC Non Destructive Testing (NDT) notification No. 004032 and performed Magnetic particle Testing (MT) of approximately 15% of the welds previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a MT report for this date. The weld designations are as follows: SEG019C-014, 001, 016, 040, 046, 012, 013, 010, 007, 008 and 009, SEG019A-031, SEG017B-017, 004, 019, 033, 034, 038, 020, 021, 023, 024, 025 and 026, SEG019B-007, 008, 013 and 014.

This QA observed that weld SEG019B-046 mentioned on the NDT notification to be tested using the MT method, did not pass the visual testing acceptance criteria of AWS D1.5 2002 section 6.26. This weld has a gash in the face of the weld measuring approximately 4mm deep. The gash appears to have been created by a grinder. The contractors QC informed this QA that the MT technicians had rejected a linear indication and ZPMC workers excavated the indication by grinding but the welder has not yet performed the repair.

Prior to this QA departing the office to perform the NDT mentioned above, ZPMC QA identified as Mr. Li

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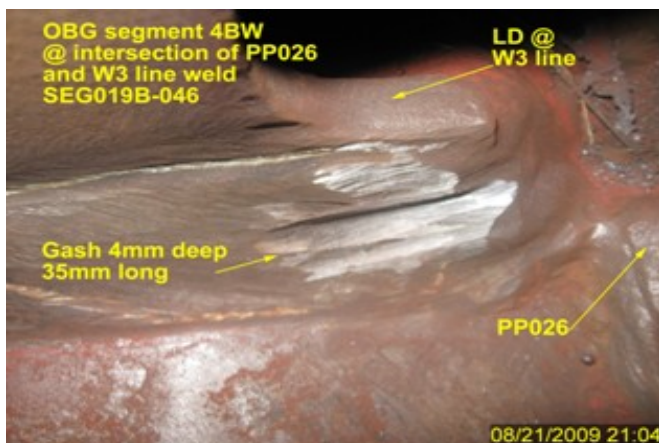
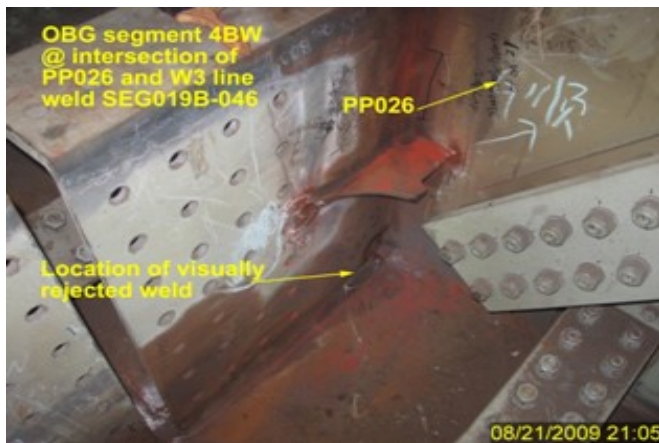
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Xiuyang informed this QA that the NDT notification mentioned above was incomplete. Mr. Li hand wrote item line 9 on this notification and added two welds (weld OBW4A-002 and OBW4A-003) to be tested using the MT method. After arriving at OBG lift 4W this QA observed that it did not appear as though ZPMC performed the MT of these two welds. The welds had not been properly cleaned to facilitate MT and it did not appear that ZPMC QC MT technicians had signed off on the material indicating the acceptance of these welds. This QA did not perform the 15% verification MT on these two welds.

## OBG Trial assembly segment 5AW

This QA received ZPMC Non Destructive Testing (NDT) notification No. 004032 and performed Magnetic particle Testing (MT) of approximately 15% of the welds previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated a MT report for this date. The weld designations are as follows: SEG021C-007, 008, 013 and 014.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



## Summary of Conversations:

As mentioned above.

## Comments

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This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Hall,Steven	Quality Assurance Inspector
<b>Reviewed By:</b>	Prue,Erik	QA Reviewer

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